High-Temperature Coatings Offer Energy Savings

Ames Research Center

Emisshield
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NASA Technology

- As the U.S. X-Plane Program continued to break new boundaries, NASA researched new thermal protection materials for reusable spacecraft
- This research resulted in the Protective Ceramic Coating Material (PCCM), a thin and lightweight coating that protects against extreme temperatures

Partnership

- When NASA made PCCM available, Emisshield licensed the coating for research and development
- After testing its capabilities, Emisshield licensed PCCM to include all applications except space and space vehicles
- From the base license the company developed two new patents, including technology to apply PCCM more easily to metal surfaces with a spray gun

Benefits

- Emisshield (the company's main product line) works to protect and increase the efficiency of any place that requires heat for production
- Emisshield saves up to 15 percent on energy and boosts productivity by up to 15 percent
- Furnaces that have been improved include those making windshields, bread, and wine bottles